

The Research Center Pharmaceutical Engineering GmbH (RCPE) is a global leader in pharmaceutical engineering sciences. We help our partners create and manufacture advanced medicines for patients worldwide through optimizing products and processes.

## PAID DIPLOMA / MASTER'S THESIS

# DEVELOPMENT OF A DATABASE + EASY-TO-USE INTERFACE FOR PHARMACEUTICAL FORMULATION AND PRODUCT DEVELOPMENT

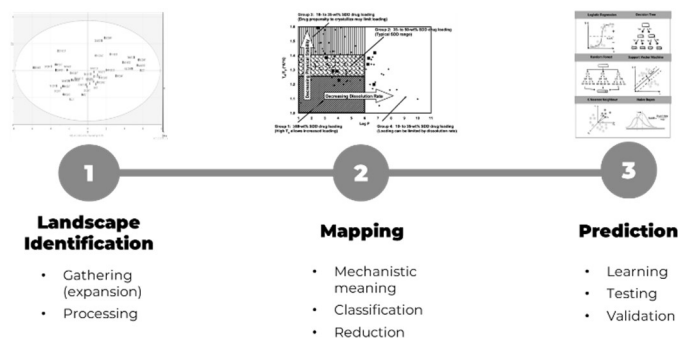
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To dedicated students of computer science, data science, natural sciences (pharmacy, biomedical engineering, physics), process engineering, or related disciplines.

## Objective

The pharmaceutical industry is currently facing (new) challenges such as high costs for production, but also increased complexity in product- and process development. Digitalisation and data management are essential to innovate pharmaceutical production in terms of sustainability and modernization. The efficient usage of available data about material characterizations and from literature will help to improve efficiency in pharmaceutical development and to reduce the experimental burden.

The goal of this master's thesis is use characterization data about isolated drug substances and mixtures to improve decision making in pharmaceutical development processes. The outcomes will be curated databases, classification and visualization tools as well as ML-based solutions.



Depending on the individual interest emphasis can be given to materials databases, data analyses or digital processes.

## Within the framework of this diploma / master's thesis we offer the following

- Extensive participation in a top-level and industrially relevant research project in an international environment
- Supervised training in the task
- Assistance of experienced staff with the implementation of innovative ideas
- Access to highly modern infrastructure on campus of Graz University of Technology
- Assistance with the publication of results

## Financing

- Compensation on the basis of a service contract

If you are interested in writing your thesis at the interface between university research and industry/ business and to contribute to the optimization of product and process development in the pharmaceutical industry, please contact us indicating the reference number.

## Contact

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